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THE TECH.

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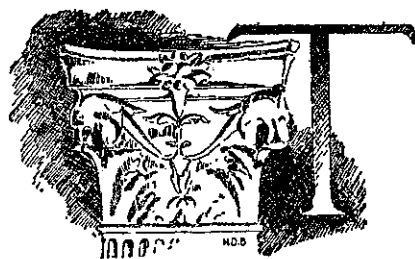
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THE TECH notices with strong satisfaction the process of broadening and liberalizing which has been going on for the last few years in the affairs of the Institute. The gradual introduction of non-professional studies into the various courses, the widening and deepening of the departments of literature, language, and history, the increased appreciation of the General Course, shown not only by the Faculty, but also by the students, are all signs that the day is near when the Institute will take its true place among scientific and technical schools, and will cease to be looked down upon as a place for learning a trade. The more closely the ideal of a scientific education is followed, the more sure and speedy will be the permanent success. It is all very well to have a machine for turning out men who will drop into thousand-dollar positions—and stay there. But there is a higher end than that, after all. Some one has said that a specialist may be sharp and bright as a needle,

but is apt to be quite as hard and narrow. An institution that contents itself with manufacturing chemists and engineers rather than educating them, will find its products smack of the shop ever afterward, and itself will justly be regarded as a mill instead of a college.

We rejoice to see that the Institute seems to be escaping this rock upon which it is so easy to split; for every year the indications that the true scientific spirit has taken firm hold of the helm multiply. The establishment of such periodicals as the *Technology Quarterly* and the *Architectural Review*, are unmistakable proofs of the willingness of the students to co-operate in the work. These signs of the times cannot be disregarded.

We even venture to predict that the General Course will eventually be one of the most popular,—will be the one toward which all men will turn who prefer a scientific to a classical education, and will attract and graduate more men than any of the other courses. Just in so far as the other courses are adapted to this demand for breadth and general training, just so far, we think, will they prosper. The large and noticeable increase of students in some of the courses in the last few years, is mainly due to the liberal and scientific spirit displayed in their management. It is encouraging to all well-wishers of the Institute to note this steady progress along lines tending in the right direction.

IT is the proper time now if at all, to speak on the subject of watching the students during the annual and semi-annual examinations. All over the college world there has been much discussion of this subject, but without any great results. In the University of Virginia, the students write their examinations, unwatched by their teachers. Those in charge of the various departments see that the papers are distributed

and by their presence assure a certain amount of quiet, so that those who wish to work swiftly and uninterruptedly may not be disturbed by any one noisily inclined. Watching there is none, for the students act on their honor, certifying in writing that they have neither given nor received assistance. This is more satisfactory all around than the system of proctoring. If a student has made up his mind to cheat, there is no plan known to those watching him whereby detection is much more than possible. A thousand plans may be hatched for outwitting the instructors, and they are generally successful. It is impossible to prevent cribbing, if the student has not the backbone to get along without it. There is at least one department in the Institute where the students are not watched during examinations, and it is safe to wager that there is far less cheating than if there was a strict watch kept. In fact, in the writer's experience, there is no trace of underhand work. Were one of these men, so trusted, to cheat, he would be frowned upon so quickly that he would wish the floor to rise up and swallow him. It is human nature to do wrong when others are placed over us to prevent us doing so, but it is just as much human nature to appreciate confidence placed in us, and live up to it. This plan may not be practicable in the Freshman year, but it is worth trying with the upper-class men. The proctors and students both would be relieved, and it is very certain the results would be encouraging.

SINCE the appearance of the last TECH, we have learned from the secretary that the Corporation and the Faculty do not wish the new building to be called Kidder Building, for the reason that this would give undue prominence to the bequest of Mr. Kidder, neglecting the other donors entirely. Our idea in the editorial was wholly to give the building a more fitting name than that of "New," and as Kidder was the name most prominent in the building which the students could see, we suggested that. We still think that some name ought to

be chosen, and as it would be impracticable to name it after any of the donors, we would offer as a suggestion that it be named after Professor Nichols. At any rate give it some name, because it cannot be "New" much longer.

BIG Techs. and little Techs., from Freshmen to Seniors, turned out to greet the Glee Club on the occasion of its annual concert, on the 16th inst., and between encores and comments managed to put in rather an enjoyable evening. The Glee Club has the field all to itself now, and for the reason that it is the sole musical organization at the Tech., it ought to be well patronized. Its concerts give to us who are musically inclined, but not so constituted, an opportunity to encourage those among us who have spent long hours in training for no mercenary object, and show to the world that we are not wholly wrapt up in batteries and gear-teeth. Every organization at the Institute which directly or indirectly drags us out of our technical ruts, is doing good work, and deserves a bouquet therefor. We are fed here on the bread and meat of hard science and theory, and all of the luxuries of the mind which we can manage to get, by hook or crook, tend by just so much to keep up a normal digestion. When the millennium shall have arrived, and college training shall measure out to each man, as the pharmacist compounds a prescription, so much of the technical drug, a correct amount of athletics and exercise to bring the drug into solution, and a proportional amount of flavor and aroma in the way of music, literature and history, then shall we Techs. have a larger glee club, more carefully trained, more men to produce that beautiful combination of banjo and guitar, and an orchestra which will not need to be resuscitated each year, only to collapse at the slightest provocation.

THE ETHICS OF BOXING AND OTHER MANLY SPORTS," by John Boyle O'Reilly, is a book that every Tech. man should read. It impresses upon the reader the

fact that all mental, as well as physical, labor, is at a great disadvantage unless the body is well trained and in a high state of sanitary excellence. Students, Faculty, and Corporation, alike seem either to be ignorant of this well-established fact, or to purposely disregard it. We have vainly striven to interest our readers in this subject so important to us as students, that some steps might be taken looking to the improvement of our gymnasium facilities.

The line between boxing as a manly and highly improving exercise and that lowest of all debasing contests, the prize-fight, is clearly drawn,—and satisfactory to the supporters of the former. The book also contains a number of chapters on the canoe, with much valuable advice as to the management of the same, in which the author states an ideal summer can be passed. If those whose business it is to look after our well-being, mentally and physically, had interested themselves in our athletics one half as much as Mr. O'Reilly has, we would no longer be cooped up in a diminutive gymnasium, and would long ere this have had a professor of physical culture.

IT frequently happens that in the busy whirl of life there comes a pause, the duration of which is of such length that it is of no practical value, being much too short for the accomplishment of certain undertakings, while it is equally too long to devote to others. With much to do and but a short time in which to do it, this enforced inactivity is exasperating, and we cast about us to find some employment that will exactly fill the time at our disposal before the regular routine of the next hour shall commence.

Did it ever occur to the readers of THE TECH that its editor is frequently placed in an analogous position? With an exact number of pages to fill with articles varying in length from a few lines to as many pages, he frequently comes to a blank space that must, by some means, be filled; and to render his task more exasperating still, his table may be covered with articles both short and long, among which there is not one

that will fill the space in question in a manner acceptable to the reader. This forced writing must always be inferior to the natural expression of thought, so that it would perhaps be better sometimes to leave the space a blank, as our advertising agent does. But popular opinion has said no, and we, not daring thus to oppose ourselves to that august tribunal, bow our heads in humble submission, and fill the space whether or no.

THE TECH has to again return its thanks for a most excellent anonymous contribution. Previously to this we have been at a loss to understand why any one should send us a nameless favor, since it is well known that we never publish any such. We have usually ascribed this omission of the name to bashfulness, and wondered thereat. The present contribution is, however, an exception. We admire the sagacity of the writer in not discovering to us his identity; for although great authors frequently have the same ideas, we should be sorely tempted to believe that Byron had at least influenced our contributor's style, since the resemblance between his manuscript and verse 45 Canto III. of Childe Harold is more than striking.

WE understand that the '88 Class Day Committee have about decided on all the arrangements for Class Day. The date which has been fixed upon is Monday, May 28th, the day before the degrees are to be conferred. Whilst the arrangements have not been so entirely completed as to permit of a description of the exercises, we can say that it has been the aim of the Committee, as far as possible, to get up a programme which can be followed closely by other classes hereafter. The Class Day officers have been elected, and the Committee are now at work on the actual preparation of the Class Day arrangements. The assessment on the members of the class will probably be the same as it was last year, but it will be impossible to state this exactly until the Committee have got the expense estimated more carefully.

Side Steps in the Past.

WITHIN a hundred miles of the Hub an old city rests placidly by the sea, gazing, with folded hands, eastward over the dark blue waves that used to bear her argosies to and from the Orient. Her work rests in the past, and, like an aged mother, all her thoughts are with the years that have sped. She dreams, and her vanished children once more return and fill her streets; her wharves once more are crowded with many a strange craft and shapely model that would delight the heart of the yachtsman of to-day. The tackle creaks to the tune of the sailors' "Yo heave ho, my lads; bend your backs, hoist below, yo heave ho!" and the air is redolent with the perfume of spices from far-off climes, as the heavy bales rise slowly from the ship's hold to upper air.

The old warehouses open their doors, and disclose the merchant and his clerks bending low over their ledgers, while porters trundle many a queer-shaped cask, box, and bale into the dim recesses beyond. But the angel of this resurrection again lays its dead, and the ghostly ships sail back into the past; the doors swing to on their hinges, and the present sees but a few aged wharves, with moss-covered piers, around which the waters gurgle as the tide sweeps in and out from the tumultuous Atlantic. The ancient commercial buildings, with their many stories and queer little Queen Anne window-panes, blink in the rays of the setting sun like old eyes just awakening from a nap. The streets run aimlessly down to the wharves with a sort of hands-in-the-pocket style, as if lounging about for companionship, and astonished to find everything so dead, wheel sharply off to visit the next one, and so on, in and out, until the tour is complete, and it is forced to strike off for town.

The streets all radiate from a common centre called the square. Here the principal church stands, from which nightly the curfew bell sends forth its note of warning and command, telling of nine o'clock and a completed day. "Innocuous desuetude" has not yet penetrated the precincts of the town, and the good old way is the

way yet. Enclosing the Square come the shops, — not stores; shops is the word here, — standing shoulder to shoulder, guiltless of any new school levity, but serious, sedate, placid shops, that know they have a certain dignity to support, and are not going to upset it by gimcracks of any kind. They all stop respectfully quite a distance from the church, which stands alone. No putting stores under consecrated buildings when that edifice was erected. There was a deference and politeness toward religion and its outward habiliments that many a year has failed to weaken. In this church gathered the Puritan element, and heard unflinchingly the long prayer, an hour in length, and the sermon, with its heads, divisions, firstlys, secondlys, sometimes to sixthlys, followed by in conclusion, lastly, to conclude, finally. Farther down the town the royalists used to worship, and after them the tories, who handed it over to its present owners, the Episcopalians. The pews are, or were, all square, high-backed, shutting the occupants, when sitting, from the view of every one but the rector. The pulpit was reached by a pair of stairs that wound round and round within a column, so that the clergyman disappeared after entering until he emerged high in air, "to be seen of all men." Above hung the sounding-board, that caught the words of wisdom and showered them back to the parishioners in the pews below. On the cushion rested the pride of the church, a large Bible with silver clasps, presented by Queen Anne in the days when church and state meant something.

It was at the library or club, however, that the best souvenirs of the last generation were to be found. At whatever time you dropped in, — morning, noon, or night, — there, gathered round the periodicals, or poring over some musty volumes, would be found the literary element of the city. A visitor could tell by the strangeness of the dress that many wore, and the courtliness with which they approached each other, that he was looking on other days. One bright particular light wore a dark-blue swallow-tail coat, with brass buttons of immense size and dazzling brilliancy. A soiled ruffle forced its

way beyond his waistcoat, and a dickey of colossal height, surrounded by fold upon fold of a peculiarly checkered neckerchief, swathed his throat. The nose mounted a pair of gold-rimmed spectacles, that added a particular richness and fierceness to this very red and prominent organ, the lower end of which was always powdered with the best Copenhagen, although a large red handkerchief, that would have delighted a matador, was continually mopping and extracting ringing reports that bore some slight resemblance to a naval salute. A tall silk hat, with the fur carefully brushed the wrong way, rested within reach and completed the attire. Tradition hinted that he had once held some official position, and had lived, as Falstaff swore he would, though with a different meaning, "more cleanly."

As might be expected, celibacy claimed him as her own, although hidden away somewhere, there was the story of an affair that made that worthy's sombre, and if report was true, dirty apartments in a small, dingy hotel a matter of some interest to the rising generation. *Vis-a-vis* to this gentleman stood a medium-sized man with a strangely-shaped head, high and thin, which looked as if during the plastic period it had suffered compression. A dickey encircled his throat, which, like his neighbor's, was bandaged up to its extreme limit. A swallow-tail coat, black and buttonless, adorned his figure, with trousers of the same hue; a cambric ruffled shirt, immaculately neat, filled the space from the waist to the neck, the waistcoat being allowed to remain open for this purpose. From the back of his head rose an edifice whose prototype had flourished during the early days of 1700. Conical in shape, narrow-brimmed, made of plain black cloth, it looked more like an ant-hill, or some mathematical object for teaching, than a head-covering,

The blood of Provincial governors flowed in his veins, and traces of even a more exalted strain were to be found, if genealogy is to be credited.

At an early age he graduated from Harvard, and since that time had become a vigorous delver in Greek and Latin roots, which had so

completely got him under their control that he could talk of naught but suffixes, affixes, and radicals. To quote from Walter Savage Landor, "he devoutly worshiped the heathen and their divinities," and for many years would not enter a Christian place of worship, although careful to keep the family pew in the Episcopal Church free from debt. Sufficiently well provided with worldly goods, he had naught to do but suck in volume after volume as a sponge takes in water, absorbing, but not giving forth. For many years these two worthies had exchanged formal bows as they met morning after morning in search of their literary diet. But as the possessor of the bright buttons and swallow-tails confined all his attention to newspapers and kindred prints, the man of Harvard and buttonless swallow-tails looked down on him from over the edge of his Sallust, and loathed the "gazette reader," as he was wont to call him. The dislike was mutual, and carried itself to such a length that, both being pedestrians, they had arranged a little plan of letting each other know the direction in which they intended walking, which at last settled down into a regular habit of Brass Buttons avoiding all roads with a northerly direction on alternate weeks, at which times Buttonless could pursue the even tenor of his way with no fear of the dread appearance of Gazette looming up before him. When his week was up, he carefully turned his attention and step toward the south until another Monday. It was quite a sight to see these fossils of a past age, with bent backs and coat-tails gathered under the arms, striding along the roads at a gait that would have put a youngster to his trumps; the one delivering anacreontics in the tongue he loved so well, the other, with his back set duly toward the offending pole, muttering and shaking his head as he spurned the earth behind him.

Behind a row of stately elms a well-kept lawn sweeps back from the street to an old-fashioned mansion, with many a gabled window and queer recess. A massive door that would do valiant service in a siege, holds out a ponderous knocker, over which the king's arms are stamped.

The opening is large enough for a carriage and pair, and leads into an immense hall with a broad staircase on the left, so luxuriously inclined that hardly more exertion is necessary to mount, than walk the smooth, polished floors that smilingly invite the treading of a measure. From the doorway the porter's lodge is visible, and the driveway sweeps gracefully up to the steps. The deep wainscoting of the walls and the lover-like embrasures of the windows, bear evidence of the height of skill in workmanship.

In these long saloons many a beauty and many a wit have stood in courtly ranks until the Governor, His Majesty's representative, should open the ball. But youth and beauty, pomp and power, have all fled, and left but the stage where they played their little part. The old house keeps its secrets well, or perhaps holds converse with the nodding trees, whose branches sweep their long arms around it and gesticulate gravely to one another.

These are but side steps in our own past, a simple introduction into a region where the busy student of to-day, wrapt in the tremendous questions of science and investigation, can turn aside and rest his tired brain by a talk with a chapter from unpublished history.

Arithmetic in the Public Schools.

THE importance of General Walker's paper on "Arithmetic in the Public Schools," seems to demand a more extended notice than THE TECH has yet given. The subject is of particular interest to every one who has been passed through the school mill in our cities and large towns; for all such unfortunate beings doubtless keep vivid impressions of the special disgust which attended their study of arithmetic.

In these days, when a grammar-school graduate is expected to talk glibly about subjects of which his father never so much as heard the names, it is necessary to weigh pretty carefully the disposition of every minute of schooltime. The modern languages, the elementary sciences, the new industrial education, are all clamorous

in their demands upon the pupils' time and strength. The boys must be taught to drive nails and plane boards; the girls to hem pillow-cases and bake bread; and all very reasonably, too, for the mind can be truly educated only through the senses. There is danger, however, amid the clash of conflicting systems and the hurried transition from old methods to new, that in some cases, at least, the minds of young students may be taxed beyond their capacity. The cry of overwork is already being raised in many quarters, and any measures that will help to lighten the load of studies will be highly favored by hundreds of parents and physicians.

Such then being the rich and ample supply of desirable studies, it is quite suggestive to read "that nearly four hours and a half a week, or almost exactly one fifth of the entire school-time, are devoted to the study of arithmetic, on the average, during the nine years of school-life, according to the prescribed courses." This large allowance of time is still further increased by the "home lessons" which are assigned in a majority of cases. We are forcibly reminded of Mr. Lowell's remark: "Education, we are often told, is a drawing out of the faculties. May they not be drawn out too thin?" In the case of arithmetic, it seems as if the faculty must not only be drawn out pretty thin, but even hammered to enable it to sprawl over nine years of a child's life.

Nine years on one subject! It makes one shiver a little to think of it even at this distance. What must be the feelings of a spirited and sensitive boy who is made to grind out so many "sums" a week for nine years, and that, too, in a subject often intensely distasteful to him from the very first! Is there wonder that many a child, harassed and fretted by constant number-juggling, should agree with little Marjorie Fleming that the multiplication table is "what nature itself can't endure"? Great harm is necessarily done by this attitude of antagonism which the child is driven to take, since a thorough dislike for one branch of study may very readily extend itself to all. That enthusiasm for learning, that desire for acquisition so strong in early child-

hood, can be too easily stunted by the injudicious cramming down of indigestible facts.

The study of mathematics in general is begun far too early in life. It is within the experience of most of us that algebra and geometry are very commonly taken up before the mind is ripe for them. Arithmetic ought, by rights, to be put in the same category. "I feel pretty confident," writes Professor James, "that no man will be the worse analyst, or reasoner, or mathematician at twenty for lying fallow in these respects during his entire childhood."

Of course there are still those to be confronted who claim that arithmetic has great value as an "instrument of mental culture," whatever that convenient phrase may mean. The fact cannot be ignored, however, that a large number of eminent educators do not admit that mathematics has any superior and pre-eminent distinction at all. General Walker says in this connection: "I do not hesitate to say that some of the new subjects of study, if properly pursued, will not only educate to an active exercise of the power of observation; will not only cultivate the power of generalization; will not only afford excellent practice of reasoning in general,—but will also serve to create the habit of continuous attention, as well as, or even better than, mathematics. Certainly the attention given by a class of interested children in the study of natural history, under a good teacher, is far closer and much more truly educational than the attention given by pupils who are driven reluctantly through an arid waste of mathematics."

The outcome of the present system of teaching arithmetic is itself a plain and sweeping condemnation of that system. After nine years of worry and perplexity; after all the logical puzzles that have been solved, and all the useless jargon that has been memorized,—the grammar-school graduate is often unable to add, subtract, multiply, and divide with ease and accuracy. "Unfortunately," writes General Walker, "in this matter of inaccuracy in the use of figures, resulting from the manner in which arithmetic is now taught in our schools,

the evidence is overwhelming in character and amount. Our technical schools receive pupils from the high schools, who, while they understand difficult theorems, and are masters of complicated algebraic formulæ, make mistakes in the simplest arithmetical operations." This assertion has the ring of painful reality for most of us. We know but too well how true it is. The most common remark, probably, in the halls of Rogers after examinations is, "I had the principle all right, but I made a mistake in multiplication." We have met the enemy, and we are theirs.

One of the gravest accusations still remains unstated. General Walker brings it out very vigorously in his paper. "The charge I make," he says, "against the existing course of study, is, that it is largely made up of exercises which are not exercises in arithmetic at all, or principally, but are exercises in logic; and, secondly, that as exercises in logic, these are either useless or mischievous. . . . To smuggle exercises of this character into instruction given in the name of arithmetic, is an abuse. By it has been created a bastard arithmetic, which fails to perform the true function of that study in our public schools,—namely, to produce accuracy and a reasonable degree of facility in numerical operations,—while wasting the time of the pupils, perplexing their minds, worrying their tempers, rasping their nerves, and, in case of total or partial failure, unnecessarily and unrighteously shocking and impairing their self-respect and scholarly ambition."

It is easy to recall examples of the character referred to in this extract. The best arithmetics bristle with "practical problems" on every page. Practical, forsooth! Here is one of them from an arithmetic used in the schools of one of our suburban cities: "How many men will be required, working 12 hours a day for 250 days, to dig a ditch 750 ft. long, 4 ft. wide, and 3 ft. deep, if it requires 27 men, working 13 hours a day for 62 days, to dig a ditch 403 ft. long, 3 ft. wide, and 3 ft. deep?" This, too, is an average sample. I remember at least some of us who, in such ditch-digging emergencies, used to desper-

MEMORIES.

'Twas blooming May when I saw thee last;
 And on the hills and in the vales
 The bright and glorious hues of spring
 Were budding into beauty; and as I passed
 Thee, wandering by the river's side,
 And viewed the landscape far and wide,
 I saw the power of nature, felt its thrill:
 The scene was lovely, but thou wast lovelier still.

—Ex.

Noticeable Articles.

To students of political science—and every young American should be a student of political science—the political affairs of Great Britain grow every day more interesting. As the Irish question fades into the background—and it certainly is doing so, through the complete triumph of the Unionist party—great questions involving fundamental principles of political reform for the whole kingdom come to the front, which deserve the most careful study. The local government bill now before Parliament involves nothing less than a peaceful revolution of the English political system, and is a long step toward its assimilation to our own. And along with this great measure comes a cry from every quarter for a reform of the House of Lords, and its reorganization into an efficient second chamber. This cry comes not merely from such noisy radicals as Labouchère, who made a motion the other day in the House of Commons for its abolition, but from serious political thinkers and statesmen of all parties, conservative as well as liberal. In the House of Lords itself, Lord Rosebery, one of the ablest and most promising of the younger peers, makes vigorous speeches in favor of the reform of the body to which he himself belongs; so the other day, at a public meeting, did Sir M. Hicks-Beach, a member of the Conservative Cabinet itself. In the *National Review* for March there is a very able and interesting paper on the subject by the Hon. George N. Curzon, M.P. It is a pity that this vigorous young conservative review is not made more accessible in this country by its reproduction along with the *Fortnightly*, the *Contemporary*, and the *Nineteenth Century*, for it is fully equal in ability to any of them, and to the student of the great questions of the day, all these journals are quite essential. “I am one of those,”

says Mr. Curzon, writing as a conservative, “who believe that the reform of the House of Lords is impatiently expected, and may, if much longer delayed, be imperatively demanded by the people; who hold that this expectation is a just and reasonable one, and that, as it would be wise statesmanship to anticipate, so it would be stupid folly to provoke the demand; who are of opinion that considerable reform in the upper House is not merely desirable, but it is also necessary for the continued equilibrium of the state; and who further contend that such a reform may be accomplished at the present, or at an early juncture, with the greatest advantage; that it should emanate from the Conservative party, and not from their antagonists, whose interests, as well as their prejudices, point in the opposite direction, and that no class is more deeply concerned in its success, or should co-operate more earnestly in its promotion, than the peers themselves and the aristocratic order at large.”

He then goes on to point out that it is by mere historical accident that the English second chamber has come to be based almost entirely upon the hereditary principle; and while ably defending the importance and value of the House of Lords even as at present organized, he goes on to point out unsparingly the defects that flow from the exclusive predominance of this principle. “I do not believe,” he says, “that any other fortuitous collection of five hundred individuals in the world—men chosen by no test, but bequeathed, so to speak, by a legacy of nature—would present an average of intellectual capacity so uniformly high.” He goes on to show how many of them, like the present Prime Minister, the Earl of Salisbury, received their political training by brilliant service in the House of Commons before they came to their titles, and how many more received their titles for the same sort of service. “At this moment, of the 529 lay peers, . . . considerably more than one third have been members of the House of Commons; 157 have served in the army and navy. Of existing heirs to peerages, as many as 61 are now or have been members of the House of Commons; 42 of these sit in the present House.”

It is a very common mistake to suppose that the present House of Lords are the direct descendants of the old feudal nobility. The old feudal nobility were wiped out by the Wars of the Roses. The Duke of Norfolk is the representative of one of the

very few houses that survived. It astonishes most readers to be told that the great majority of peerages have been created since the accession of George III.; 137 peers have been created by Queen Victoria herself. Mr. D'Israeli, afterward Earl of Beaconsfield and Prime Minister of England, was once so ill-advised as to ask O'Connell in the House of Commons who he was that he should have so much to say about the making of English laws. O'Connell's answer was, "that his ancestors were making British history when the D'Israelis were in all probability gathering old clothes on the Continent."

Nevertheless, the majority of thinking men in England are fully aware that the House of Lords cannot stand much longer on its present foundation. "Absenteeism on the part of the many, and loss or lack of character on the part of the few, are the stains which have so far been traced on the escutcheon of the House of Lords." It is not fair to judge of the whole body by such outcasts from society as the disreputable Duke of Marlborough, who recently honored this country with a visit, or the equally notorious Earl of Lonsdale, the descendant of the "wicked Earl," the oppressor of the poet Wordsworth's family, who was also recently rambling about this country in very disreputable company; or of the Marquis of Aylesbury, recently turned out of the English Clubs for cheating on the turf; or of the most noble, the Duke of Hamilton and Brandon, Marquis of Hamilton, Douglas and Clydesdale, Earl of Angus, Arran and Lanark, Baron Hamilton Abernethy Aven Polmont Machanshire and Innerdale, Baron of Jedburgh Forest and premier Peer in the Peerage of Scotland, and Baron Dutton, County Chester, in that of Great Britain. Of this much-betitled Peer, the following account is given in a recent newspaper: "His mother was a daughter of the Grand Duke of Baden, and a cousin of Napoleon III., and his grace is one of the lowest fellows in the kingdom. He sold the great collection of works of art that he inherited in order to pay for his debaucheries; he converted the halls of his ancestral palace literally into a dog-kennel; he is a noted pugilist, and gets up fights in which he himself contends with professional boxers before companies composed of aristocratic and unaristocratic sportsmen." That exemplary Christian, the Earl of Lonsdale, has more than twenty church livings in his gift. The Duke of Sutherland brought to America a woman, not his wife, and introduced her at

respectable houses. It is to be hoped that before he left our shores, this impudent aristocratic black-guard made acquaintance with the toe of some respectable American boot.

It would be wrong to judge of the whole English peerage by such disreputable specimens; but, as Mr. Curzon remarks, a disreputable member of the House of Commons reflects disgrace only on the constituency that elected him, while a disreputable peer is a standing disgrace to his order. It is clear that the present state of things cannot, for many reasons, much longer continue. But John Bull is not a man like his French neighbor, to pull down his political house when he gets discontented with it. He carefully preserves it, but he adds a new wing here and a new story there, and so adapts it to the new wants of the new times. Hence no country in Europe has had such a steady, continuous, and peaceful political development. It is safe to say that the House of Lords will not be abolished, and even that the hereditary principle will not be wholly done away with. But it is equally safe to predict that within no very long time the House of Lords will be reformed into a more efficient working second chamber. At present, as some one has recently pointed out, inasmuch as three constitutes a quorum, it might conceivably happen that the exemplary noblemen described above might represent the upper chamber in passing an Act of Parliament for the government of the British Empire. The following is an extract from a speech of Lord Rosebery's: "I remember since I have been a member of this House, of a noble Lord addressing a quorum of your Lordships, consisting of the noble and learned Lord on the woolsack, and the minister who had to answer him, for four mortal hours by the clock,—when this vast hall in which we are seated contained only these three individuals." Lord Ellenborough: "I beg the noble Earl's pardon. Part of the time I was present." The Earl of Rosebery: "The noble Lord's attendance, I understand, was only partial, and not for the whole time; so I may say three and one-half persons were present. Striking an average, I think that will be a satisfactory figure." Imagine a quorum of three and one-half legislating in the United States Senate.

It is always interesting to compare Englishmen's estimate of their own form of government with their estimate of ours. The great jurist whom England

has recently lost, Sir Henry Maine, in his last volume of Essays entitled "Popular Government," has a valuable paper on our Constitution, in which he says: "The Senate of the United States . . . is at this moment one of the most powerful political bodies in the world. In point of dignity and authority, it has in no wise disappointed the sanguine expectations of its founders."

The student of politics will also read with pleasure and profit in the *Nineteenth Century* for February and March two papers on our own political system, by Mr. Phelps, our present Minister to England. The first, a clear and brief sketch of the provisions of our Constitution, contains nothing which will be new to an American who knows his Constitution—and every American should know his Constitution. But the second, containing the observations which one of our most eminent lawyers sees fit to lay before the British public, is interesting. Mr. Phelps lays much stress upon the most original part of our system, the one to which there is no counterpart in a country whose Parliament is omnipotent,—the position and power of the United States Supreme Court. These papers ought to be read by all our students of political science.

W. P. A.

The Ganoid; or, a "Tail" of Long Ago.

With a biscuit in my pocket and a hammer in my hand,
Chipping bits from off the strata that were "cropping"
o'er the land,

Wearied out at length, I rested by a fracture fresh and new,
And gazed in languid humor at the thing it brought to
view.

I had found an ancient casket that Agassiz e'en would hail,
When he saw beneath its cover that a ganoid curled his
tail.

It was lying half imbedded in its matrix in the stone,
And scintillating round it bright micaceous fragments
shone;

And I thought of all the weary, sad, and slow-revolving
years

Since the earth commenced her circling search for light
among the spheres;

And the huge ichthyosaurus must have felt his courage
fail

In the turbulence around him, when this ganoid curled his
tail.

When from out the turbid ocean seethed an atmosphere of
steam,

And the waves refused in darkness to reflect a single beam,
And barren rocks, that dimly rose like spectres from the
waste,

Glared grimly for a little while, and disappeared in haste,
Melted down with heat and horror—even gneiss could not
prevail

In those liquidating eras when this ganoid curled his tail.

Check the onward march of Nature, and reverse the wheels
of Time

From the morn when Eden blossomed in its freshness and
its prime;

Roll it backward; roll it backward—backward still, and
backward more,

Through cycles till the effort strains the mind till it is sore;
Still a nebula beyond you, down within the Past's dim
vale,

Are those years unchronologic when this ganoid curled his
tail.

And I thought of all the struggles that we make with such
ado

To preserve our names from sinking for a century or two;
How the deeds of warrior, poet, stern philosopher or sage
Are writ in brilliant letters on the Past's historic page;

And yet, the years the best have won is but a fabric frail
By the grand unnumbered eras when this ganoid curled
his tail.

You're satisfied with glory, and you think the thing is
done

If you perish in the conflict, when a marble bust is won.
Here's a rival—look upon him—he's not a carved ideal,
For a lime infusion keeps him still original and real.

The antiseptic properties of Fame would prove but frail
Had you done your deeds of wonder when this ganoid
curled his tail.

Perhaps, in scaly armor, up and down those ancient seas,
Roamed he, with a restless appetite that nothing could ap-
pease,

Crushing shoals and hosts of being, every one of which
that ran,

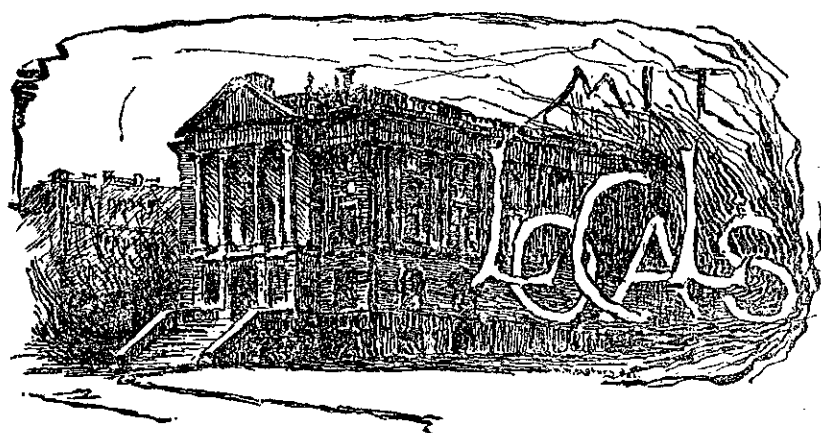
Would, in course of time and season, have "developed"
up to man.

But "*fala sic profulgent*," and we only may bewail
Our dear relations slaughtered when this ganoid curled his
tail.

But it is a sad reflection—sad and stern enough for tears,
To know that blood and carnage trail along the track of
years;

That Love, and Peace, and Mercy had not even then began
To sow the seeds of quiet for the future coming man,
And the cries of God's first creatures were a universal
wail

Of fierce and brutal conflict when this ganoid curled his
tail.



And still the mumps hang on.

No more exams. until the annuals.

The K_2S met at Young's on the 19th.

Work is progressing on the tennis courts.

The Freshman Battalion will soon be photographed.

The annual examinations commence Wednesday, May 16th.

The Cycling Club has resumed its Saturday afternoon runs.

A. E. Woodward, '88, had a blast furnace run for copper last Tuesday.

Professor Lanza's reception to the Juniors was very largely attended.

The '90 Mechanicals made an excursion to the Navy Yard on the 19th.

The Seniors gave the Faculty a reception last Tuesday at the Parker House.

The Cycling Club have issued "shingles" somewhat similar to those of THE TECH.

We regret to state that Mr. I. L'H. Gardiner, of THE TECH Board, is quite ill at home.

The '91 Society theatre party had to be abandoned, as it was impossible to get seats.

Mr. E. W. Hyde, '90, after a severe illness, has gone home, not to return this year.

Jags, '90, remarks that he wishes he was a razor, because it always has a first-rate edge on.

The Boards of Directors and Editors of THE TECH were photographed by Notman last Saturday.

F. E. Foss, '86, has invented a method of calculating earthwork by means of a balance-scale.

Mr. A. L. Kean, '88, has returned from the Bermudas, having turned out a "Mascot" on the lily blight.

It is understood that one of '88's theses will be entitled, "Experimentation on the Invention of the Greatest Motive Power on Earth."

From the slight attendance, it would seem that but few of the students know of Mrs. Rogers pleasant Wednesday evening receptions.

The Co-operative Society looked up the lunch-counter matter last year, and found it decidedly impracticable.

The Foot-Ball Association will meet shortly, to elect delegates to the fall convention at Springfield.

"ENQUIRER," '91.—No. When you hear of '89 receiving S. B. next year, it has no reference to either cough-drops or a Senior ball.

There is some talk of a concert being given in Boston, early in May, by the combined Glee Clubs of Tech., Amherst, and Brown.

M. E. Cobb, '87, is in charge of Turner, Clark & Rawson's Water Works, at Old Orchard, Me.

Mr. William H. Merrill, Jr., '89, begins his duties as an Editor of THE TECH with this number.

C. W. Hinman, State Inspector of Gas, has been giving some very interesting lectures to the third-year Industrial Chemists.

Professor Lanza gave a most enjoyable reception on the 20th, at his residence, 22 West Cedar Street.

The fourth-year Architects have moved from Room 21 to Room 23, in order to have more quiet in which to complete their thesis drawings.

Professor: "What is the case of Schweiz?"

Junior (whose recollection of last night's crackers and cheese is still fresh): "Schweizer-käse." (Fact.)

This spring the Junior Civils are divided into two field groups. One under Prof. Burton goes to Malden; the other, under Mr. Allen, to Wellesley.

The Freshman nine opened the ball season by a game with a picked nine,—the Boston Univ. nine, with whom they were to play, being unable to appear.

A new box has appeared in Rogers corridor, to receive *any* and all contributions for '90's "Technique." We hope it will be well patronized, for it is a good idea.

The Hammer and Tongs Club held their monthly dinner at the Thorndike, April 14th. Messrs. L. M. Hills, '90, and C. E. Ripley, '90, were initiated.

The Society of Arts holds its regular meeting Thursday evening, in Rogers 15. A paper on "Precious Stones in the Last Decade," will be read by Mr. G. F. Kunz, of Tiffany & Co.

Prof. F. W. Clark will shortly leave the Institute to go on a professional trip to Butte, Montana. He will return early in June, in time to take charge of the Summer Mining School.

Frederick Thompson, '87, has been appointed Superintendent of Bridges on the Richmond and Danville Railroad Systems, with headquarters at Washington, D. C.

A shining light of '89, on observing the signs of "Don't mix" on some solutions in the Biological laboratory, remarked that there was a good deal of hard sense in a Biological, after all.

As it has been impossible to secure the Lynn track for the first Saturday in May, either the Athletic Meeting will be postponed a week, or the Cycling Club races will not come off at the same time.

All '88 men who intend settling in the vicinity of Chicago, should send their names to H. Ward Leonard, care of Western Edison Light Co., Chicago, for membership in the North-Western Association of the M. I. T.

Second year mentions in the Architectural Department, on the design for a circular temple, were awarded as follows: *First*: 1st, Goodwillie; 2d, Machado. *Second*: 1st, Ropes; 2d, Ford. *Third*: 1st, Pennell; 2d, Walker; 3d, Rice.

The Tennis Association has formed as follows: President, W. E. Mott, '88; Vice-President, B. Sturgis, '90; Secretary, J. L. Batchedor, Jr., '90; Treasurer, W. B. Thurber, '89; Executive Committee, Messrs. Durfee, '89, C. E. Ripley, '90, and Goodhue, '91.

Mentions in the Architectural Department in the third and fourth year designs, were awarded as follows. For an academic school: first, G. C. Shattuck; second, W. Proctor, Jr. Design for suburban library, *First*: 1st, W. H. Kilham; 2d, A. V. Edwards; 3d, C. A. Crane; *Second*: 1st, J. Hall Rankin; 2d, Goodwillie; 3d, Spencer.

The Class-Day Officers for '88 are as follows: Chief Marshal, A. T. Bradlee; Aids, H. Y. Horn, Jr., H. F. Bigelow, and Richard Devens; Historian, L. A. Ferguson; Statistician, A. S. Warren; Odist, O. B. Roberts. Elaborate preparations are in progress. The assessment will be very reasonable, as it will be in the neighborhood of ten dollars.

The class in the Summer School of Topography will leave Boston not later than June 1st. Four weeks will be spent at Deerfield, near Northampton, Conn., and the class will be accompanied by Professors Swain, Niles, and Burton. Professor Swain will give some work in Hydraulic Measurements, which is impracticable at the Institute. The total expense per man will not exceed \$50.

There seems to be a general feeling in '90 that that class will not be represented by a nine this spring. The chief reason is, that both her pitchers and her catcher have left the class. Moreover, there are but few of the fellows who care to spend their spare time in practice; and as it is impossible to play ball without practice, present circumstances point strongly toward an absence of a '90 class nine on the field this spring. However, the Miners and Chemists are united, and hope to present a good nine to represent their courses.

On the afternoon of Friday, April 27th, there will be presented at the Hollis Street Theatre a comic opera entitled the "Mermaid, or the

Curse of Cape Cod." The receipts go toward increasing the fund for the establishment of a Marine Biological Laboratory, in which the Institute is more or less interested. The opera will be presented by the best amateur talent of Boston, and those who attend will be doubly repaid in that they will listen to a pleasing performance and have the satisfaction of contributing toward a worthy object.

The Glee Club gave their most successful concert on Monday, April 16th, in Association Hall. The hall was well filled with an appreciative and enthusiastic audience. Much careful training was shown, and the men deserve much praise for their enterprise and spirit in overcoming the many obstacles in their way. The selections were good and well rendered. Miss Baldwin sang with her usual ease and vivacity, and the piano solos by Mrs. Shepard, as well as the selections by the Banjo and Guitar duo, added much to the enjoyment of the concert.

Roberts Bros. have recently issued "The Study of Politics," by Professor Atkinson. This book "grew out of an introduction to a course on Constitutional History given to the Senior class at the Institute," and is uniform with the author's attractive little books, "On the Right Use of Books," and "On History and the Study of History." Professor Atkinson is so broad in his feeling, and writes so vigorously, that no sincere student can fail to find pleasure in these books. They are small, and are not supposed to be comprehensive treatises; their purpose is principally to stimulate interest, and this they are most successful in doing.

The Senior Ball was held in Odd Fellows Hall, Friday evening, April 13th. There were about eighty couples in all, and among these some fifteen or twenty Seniors,—an unusually large number. The ball may not have been a financial success, but it was throughout a most enjoyable affair, and the committee, working as they did against lack of interest with the upper classes, and against misrepresentation and prejudice with the Freshmen, deserve the thanks of all for turning what promised to be a dismal

failure into a real success. The matrons were Mrs. Webster Wells, Mrs. Cecil H. Peabody, Mrs. Davis R. Dewey. Henry J. Horn, Jr., '88, was Floor Director, and the Committee: James P. Gilbert, '89, Arthur M. Forristall, '89, Clayton W. Pike, '88, Ernest M. A. Machado, '90, Will I. Finch, '90, Atherton Loring, '90, J. Linfield Damon, '90, Walter B. Trowbridge, '91, Henry G. Bradlee, '91. The music was furnished by the Salem Cadet Orchestra, and was most successful in enlivening the heels of the dancers.

College Notes.

About \$1,000 was realized at the first performance of the Harvard Hasty Pudding theatricals in New York, April 9th.

Columbia has secured the services of Keefe and Welch, the noted pitchers of the New Yorks, to coach the nine.

The Class-day tax of Princeton, '88, will be \$12 for each member.

The championship of the Inter-collegiate Base-ball League is thought to lie between Dartmouth and Williams.

The Princeton Library is endeavoring to collect complete statistics of the late storm.

Holden, '88, has begun to practice sprinting with the candidates for the Mott Haven team. In his Freshman year he made very fast time in the 100-yards dash.—*Crimson*.

The mumps have reached Yale, and seventeen men in the Freshman Class have been attacked.

At a meeting of the Trustees of Clark University, it was voted to begin the building of the second of the University buildings immediately. It will be over two hundred feet long, three stories high, and will be used as a Chemical Laboratory.—*Ex*.

President Patton, of Princeton, has already entered a plea for a new dormitory, a gymnasium, and a commencement hall.

A Harvard club is being organized in Brooklyn. There are 300 Harvard graduates in that city, and over half of that number have already signed as members.—*Ex.*

There are eleven graduates of Harvard studying at Berlin University.

A club has been formed at Johns Hopkins University, called the "Hopkins Tramp Club." No one can be admitted to membership until he has walked thirty miles in one day in company with some of the members.

A new book on Yale athletics is being prepared by Hurd, '88, and will contain accounts of all Yale's athletic contests from 1840 to 1888.

The first telescope used in this country for astronomical purposes was set up at Yale, in 1830.—*Yale News.*

Seventy-five out of every hundred Freshmen who enter Yale graduate; while Harvard graduates seventy-four out of every hundred.—*Ex.* At the Institute about forty per cent graduate.

Harvard students will hereafter be given credit for their work in the Summer School courses the same as if they had done the work during the college year.

Prof. G. S. Hall, of Johns Hopkins University, has been offered, and will probably accept, the Presidency of Clark University, the new college at Worcester.—*Ex.*

COMMUNICATIONS.

The Editors do not hold themselves responsible for opinions expressed by correspondents.

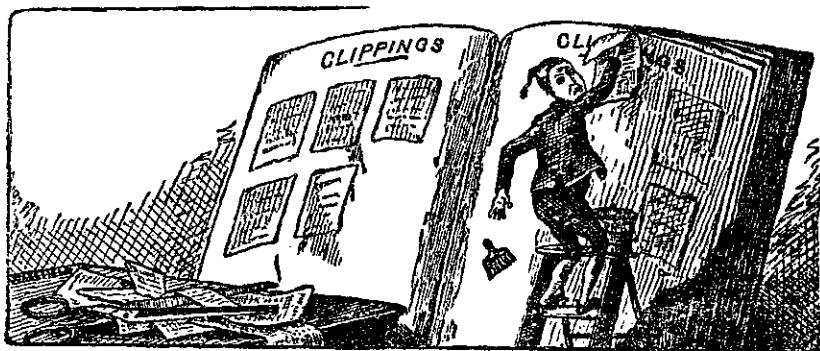
DEAR EDITOR OR EDITORS:—

(For we desire to embrace the entire fraternity). We are suffering from a blight, from a "winter of discontent" to our youthful hopes as co-ed-"tresses." Please recognize the *double entendre*. For a long time we have been casting about for a safety-valve through which the immense amount of steam that has generated may have an outlet. We do not aspire to a *very* high rank among the college

press, but we do claim that our sex should screen us from pen-and-ink brutality. We have received such an attack from—well, we reserve the name, for the sake of his classmates; sufficient to say that the institution is not a Sabbath day's journey from your city. We have therefore selected your columns, well knowing that its circulation and general standing will both bring it before the person desired and add weight to its character. We should use our own periodical but for an unhappy occurrence that happened at its birth, all the articles received being fulminations—what a long word; it almost takes my breath away—against the authors' enemies; so that the Board thought it necessary to "sit down" (excuse this borrowed slang) on all further productions of this kind. This leaves us in the lurch if you will not admit our communication. You will, won't you? "But to return to our muttons," as our French teacher puts it. While I was abroad last summer I went to Paris. I had a lovely time, just too perfect for anything, and the girls sent me a lot of letters asking for my views on French politics, and all about General Boulanger and Wilson. I did not like Wilson a bit. He is tall and thin, with a deep blonde moustache; in fact, he doesn't look at all like a Frenchman. I heard him speak before parliament, and detected three or four mistakes in his French. Besides, just think of those crosses sold to butchers, and bakers, and candlestick-makers. It is just horrid! I wish I had been lucky enough to get one. I am almost sorry that I am an American. However, he is rich; that's one consolation.

I made all the girls fall desperately in love with the General, and sent them as many as twenty photographs with all his medals on, and his sword by his side. Everybody says that I have great descriptive powers; and I think I must have, for when I once get started I can hardly stop. I have written as many as twenty pages of note paper crossed to my "best girl" time and again. I think they are real interesting if I do say it. Everybody said we were on the eve of a revolution when I was at Paris, and I expected delightful things, just what one reads about,—the sacking of the city, the brave soldier doing his duty, the rabble, and *little I*, perhaps, a possible heroine. However, I have already taken up too much of your valuable space, and will tell you all about it another time. Yours, '91.

P. S. There, I have forgotten all I wanted to tell you about my troubles.



WAITING.

Come home, come home, nor tarry more,
 O best beloved chum;
 Down virtuous throat no longer pour
 Seductive beer and rum.
 No more 'bout tavern's festive board
 Thy tongue facetious wag;
 Before thou'rt drunker than a lord,
 Oh! cease to hunt the "jag."
 Oh cease! Oh cease! The latch-key's tick!
 Laboriously he cometh.
 Now by yon song and mingled "hic,"
 Uproariously he bummeth!
 He panteth up each lengthening flight—
 The heavy footsteps lag.
 Chum, thou'rt in an unrighteous plight,
 From having tracked the "jag."
 — *Columbia Spectator.*

FIRELIGHT FANCIES.

The student sits by his fire,
 And heeds not the pouring rain,
 While many fancies come stirring
 Over his tired brain.
 And he builds him an airy castle
 In the smoke of his cigarette,
 Of Maud, so charming and pretty,
 And Alice, prettier yet.
 But, 'mid fancies tender and pleasant,
 One memory will not down;
 'Tis the memory ever present
 Of the bills that he owes in town.
 — *Yale Record.*

ILL-OMENED.

His arms, with strong and firm embrace,
 Her dainty form enfold,
 And she had blushed her sweet consent
 When he his story told.
 "And do you swear to keep your troth?"
 She asked with loving air;
 He gazed into her upturned face,
 "Yes, by yon elm I swear."
 A year passed by, his love grew cold,
 Of his heart she'd lost the helm.
 She blamed his fault, but the fact was this—
 The tree was a slippery elm.
 — *Yale Record.*

OUR PLEA.

O contributors kind! let us raise a small voice
 Now that we have control of the types;
 Send us rhymes, if you will, our columns to fill,
 But spare us, oh! spare us the swipes.
 The red-headed maid and the palfrey of snow,
 Are now somewhat hoary with age,
 While the sweet summer girl with her hair out of curl—
 Her tears we don't want to assuage.
 Drop Strephon and Chloë, their hair is quite snowy,
 Don't write of the feline who mewed;
 And please do not hustle to sing of the bustle—
 The ladies think this rather rude.
 Pray observe these requests, O contributors kind,
 Rack your brains, then, to find something new;
 And send us some rhymes that are up to the times,
 So we'll all be beholden to you.

— *Yale Record.*

SOME DIFFERENCE.

In the financial world to-day
 All business men combine,
 And what are known as Trusts, are made
 In sugar, flour, and wine.

These Trusts control the price of coal,
 Of whiskey, and of wheat;
 They tell how much a man must pay
 For what in life's most sweet.

Still 'tis odd, whene'er one asks
 His tailor to combine,
 And form a little Trust with him,
 He always will decline.

— *McG. J. in "Williams Weekly."*

CHESTNUTS.

'Twas with her in the skiff, one June,
 My thoughts all turned to love;
 The usual silver-spangled moon
 Was wandering above.

I talked and laughed beside "ma belle,"
 To please her I did try;
 But when a witty tale I'd tell,
 She'd laughing "Chestnuts" cry.

"One story more I'll tell, — my best;
 Tho' old, it's oft preferred:
 My darling"—ah! you know the rest—
 What's this, no "Chestnuts" heard?

— *Yale Record.*

A fashionable dressmaker has received an order from a Western woman for a gown with "one of them vestibule trains that are talked of so much in the papers."— *Ex.*